

{In Archive} draft ROC for UEC meetings.

Philip Dellinger to: Stacey Dwyer, David Gillespie, Ray Leissner, Scott Ellinger

02/02/2012 10:11 AM

From:

Philip Dellinger/R6/USEPA/US

To:

Stacey Dwyer/R6/USEPA/US, David Gillespie/R6/USEPA/US, Ray Leissner/R6/USEPA/US,

Scott Ellinger/R6/USEPA/US

Archive:

This message is being viewed in an archive.

Attached is a record of the two meetings we had with UEC. Jose drafted these based on our two recollections. Please review for accuracy and provide any comments to Jose. Thanks.



UEC - ROC for meetings.doc

### Record of Communication - Part I

## UEC – EPA Meeting of December 2, 2011 at EPA's Region 6 Offices

#### List of Participants:

UEC:

EPA:

1.- Harry Anthony

1.- William Honker

2.- Andy Barrett

2.- Troy Hill

3.- Craig W. Holmes

3.- Stacey Dwyer

4.- Kinnan Golemon

4.- Philip Dellinger

5.- Ray Leissner

6.- Scott Ellinger

7.- José E. Torres

8.- David Gillespie

At the request of Uranium Energy Corp (UEC), a meeting between UEC and EPA Region 6 representatives was arranged and held in the Regional Offices at 10:00 am on December 2, 2011.

This meeting was arranged so that the Region could answer UEC's questions on EPA's request for numerical modeling work aimed at evaluating the current use as a source of drinking water of the portion of the Goliad aquifer proposed for an Aquifer Exemption (AE) by UEC and TCEQ. UEC also had questions on the Region's request for modeling work to evaluate the fate of chemicals in the plume expected to be generated as a result of in-situ solution mining operations within that portion of the aquifer proposed for exemption.

The UEC representatives opened with providing a description of analytical ground water modeling prepared as part of the TCEQ permit/contested case hearing process. The Region then discussed the modeling that is required to address the question of current use of the aquifer for drinking water. The UEC representatives vented their concerns based on their perception that the request for numerical modeling work is inconsistent with past EPA practices in a national scale regarding the approval of AEs, and their concern that EPA is changing the applicable rules. They were provided with an outline of the current use of the aquifer in the general area of the mining permit, including a rough description of the location of the drinking water supply wells (WSWs) that EPA anticipates may be the starting basis for the numerical model.

The EPA delegation stressed that no rules are being changed, and that the need for the requested numerical modeling stems from the fact that UEC's request for an AE involves an area that is unique. The UEC representatives were reminded that, unlike the case of previous AE requests, the area in question is surrounded by a large number of active WSWs that provide water for human consumption. They were also told that, in light of the close proximity of those WSWs to the mining area, it is even more critical that EPA exercise its duty of ensuring the protection of human health and the environment by securing from the operator scientific, defensible answers to questions related to the current use of the aquifer.

The UEC delegation requested that EPA clarify what is meant by "current" and that EPA provide more specifics regarding the request for chemical fate modeling, while suggesting that UEC would probably consider tackling the task of providing a flow model as requested if EPA satisfied the above requests. EPA agreed to satisfy the above requests, and both parties agreed that more discussions regarding UEC's AE request were in order. UEC left a publication and made a quick PPT presentation that offered several examples of surface restoration at several in-situ solution uranium mines no longer in operation.

### Record of Communication - Part II

# UEC – EPA Meeting of January 18, 2012 at EPA's Region 6 Offices

List of Participants:

UEC: EPA:

1.- Harry Anthony
2.- Andy Barrett
3.- Craig W. Holmes
4.- Kinnan Golemon
5.- Van Kellen
1.- Stacey Dwyer
2.- Philip Dellinger
3.- Ray Leissner
4.- Scott Ellinger
5.- José E. Torres

At the request of Uranium Energy Corp (UEC), a meeting between UEC and EPA Region 6 representatives was arranged and held in the Regional Offices at 10:00 am on January 18, 2012.

UEC opened the meeting with a proposal that computer runs using a simplified analytical flow model could be an alternative to numerical model runs to evaluate the questions of whether the aquifer is currently being used as an underground source of drinking water (USDW). UEC's consultant illustrated with a PPT presentation the mathematical basis and validity of the proposed model.

Scott Ellinger of the Region 6 office explained that, while simple models are practical for preliminary evaluations, the risk level of the situation at hand calls for a complete, detailed numerical modeling demonstration, capable of accounting for the complexity of the geological setting and flow system. He elaborated that many more variables than those a simplified analytical model can handle need to be addressed and validated, but said that, if UEC would still wish to submit a preliminary evaluation based on a simplified analytical model, he would be more than willing to review it.

EPA proceeded to explain that modeling for five constituents might be sufficient for the chem-fate phase of the requested modeling work, as opposed to having to model for all constituents listed in the restoration tables. UEC was reminded that it is EPA's responsibility under the exemption rules and oversight authority in the regulations, for ensuring that no injection will result in a violation of CFR 144.12, and that this is the basis for requesting the chem-fate modeling work.

The UEC representatives vented concerns that UEC was being subjected to "unreasonable" requirements and delays for an AE request that in their view should be just quickly approved so that they can start injecting. They also expressed their frustration with EPA's tardiness in providing them with modeling input parameters and a definition of current, requesting this information to be provided within 24 hours. EPA then explained parameters are normally selected by the applicant, but offered to select input parameters in this case. UEC reps then responded UEC would select any modeling input parameters.

It was necessary for EPA to quickly clarify that it is normally the applicant's responsibility to do its research work and to determine the appropriate input parameters for the modeling work. EPA, however, offered to select the model input parameters for UEC, an offer that UEC was very quick to decline. The UEC delegates offered to confer internally about the model input parameters and to get back to EPA on this issue. They asked that EPA take no action until their attorney, Andy Barrett, contacted Stacey Dwyer.

Philip Dellinger, José Torres January 25, 2012